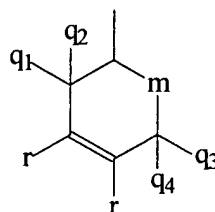


WHAT IS CLAIMED:

sub A4

1. A multi-layer rigid container for food or beverage packaging comprising at least an inner layer, an outer layer and a core layer between the inner layer and the outer layer, wherein the inner and outer layers are comprised of an aromatic polyesters or copolyesters, and wherein the core layer is comprised of an oxygen scavenging composition comprising (a) a polymer backbone; (b) cyclic olefinic pendent groups covalently linked to the polymer backbone; and (c) a transition metal catalyst.
2. The rigid container of claim 1, wherein the inner layer and the outer layer comprise aromatic polyesters or copolyesters selected from the group consisting of polyethylene terephthalate, polyethylene naphthalate, polypropylene terephthalate, polybutylene terephthalate, polyethylene isophthalate, polycyclohexanedimethanol terephthalate, polybutylene naphthalate and polycyclohexanedimethanol naphthalate, and copolymers and blends thereof.
3. The rigid container of claim 1, wherein the polymer backbone is ethylenic and the cyclic olefinic pendant groups are linked to the polymer backbone by linking groups selected from the group consisting of:
-O-(CHR)_n-; -(C=O)-O-(CHR)_n-; -NH-(CHR)_n-; -O-(C=O)-(CHR)_n-;
-(C=O)-NH-(CHR)_n-; and -(C=O)-O-CHOH-CH₂-O-;
wherein R is hydrogen or an alkyl group selected from the group consisting of methyl, ethyl, propyl and butyl groups and where n is an integer in the range from 1 to 12.
4. The rigid container of claim 1, wherein the cyclic olefinic pendent groups have the structure (II):

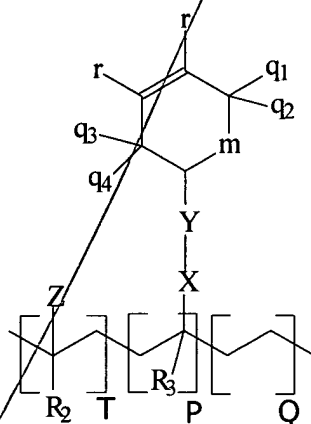
(II)



where q_1 , q_2 , q_3 , q_4 , and r are selected from the group consisting of $-H$, $-CH_3$, and $-C_2H_5$; and where m is $-(CH_2)_n-$ with n being an integer in the range from 0 to 4; and wherein, when r is $-H$, at least one of q_1 , q_2 , q_3 and q_4 is $-H$.

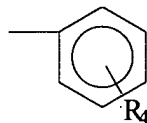
5. The rigid container of claim 3, wherein the polymeric backbone, linking groups and cyclic olefinic pendent groups comprise repeating units, each unit having a structure (III) as follows:

(III)



wherein $P+T+Q$ is 100 mol % of the total composition; P is greater than 0 mol % of the total composition; Z is selected from the group consisting of an aryl group; $-(C=O)OR_1$; $-O(C=O)R_1$; and an alkyl aryl group, structure (IV):

(IV)



where R_4 is selected from the group consisting of $-CH_3$, $-C_2H_5$, and $-H$; R_1 is selected from the group consisting of $-H$, $-CH_3$, $-C_2H_5$, $-C_3H_7$ and $-C_4H_9$; R_2 and R_3 are selected from the group consisting of $-H$ and $-CH_3$; X is selected from the group consisting of $-O-$, $-NH-$, $-(C=O)O-$, $-(C=O)NH-$, $-(C=O)S-$, $-O(C=O)-$ and $-(CHR)_{\lambda}-$; λ is an integer in the range from 1 to 6; Y is $-(CHR)_n-$, where n is an integer in the range from 0 to 12, R being selected from the group

consisting of $-H$, $-CH_3$ and $-C_2H_5$; where q_1 , q_2 , q_3 , q_4 , and r are selected from the group consisting of $-H$, $-CH_3$, and $-C_2H_5$, and where m is $-(CH_2)_n-$ and where n is an integer in the range from 0 to 4; and wherein when r is $-H$, at least one of q_1 , q_2 , q_3 and q_4 is $-H$.

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6. The rigid container of claim 1, wherein the cyclic olefinic pendent group is selected from the group consisting of cyclohexene-4-methylene radical, 1-methyl cyclohexene-4-methylene radical, 2-methyl cyclohexene-4-methylene radical, 5-methyl cyclohexene-4-methylene radical, 1,2-dimethyl cyclohexene-4-methylene radical, 1,5-dimethyl cyclohexene-4-methylene radical, 2,5-dimethyl cyclohexene-4-methylene radical, 1,2,5-trimethyl cyclohexene-4-methylene radical, cyclohexene-4-ethylene radical, 1-methyl cyclohexene-4-ethylene radical, 2-methyl cyclohexene-4-ethylene radical, 5-methyl cyclohexene-4-ethylene radical, 1,2-dimethyl cyclohexene-4-ethylene radical, 1,5-dimethyl cyclohexene-4-ethylene radical, 2,5-dimethyl cyclohexene-4-ethylene radical, 1,2,5-trimethyl cyclohexene-4-ethylene radical, cyclohexene-4-propylene radical, 1-methyl cyclohexene-4-propylene radical, 2-methyl cyclohexene-4-propylene radical, 5-methyl cyclohexene-4-propylene radical, 1,2-dimethyl cyclohexene-4-propylene radical, 1,5-dimethyl cyclohexene-4-propylene radical, 2,5-dimethyl cyclohexene-4-propylene radical, and 1,2,5-trimethyl cyclohexene-4-propylene radical.

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7. The rigid container of claim 1, wherein the oxygen scavenging composition is selected from the group consisting of a ethylene/methyl acrylate/cyclohexenyl methyl acrylate terpolymer, a cyclohexenyl methyl acrylate/ethylene copolymer, a cyclohexenyl methyl methacrylate/styrene copolymer, a cyclohexenyl methyl acrylate homopolymer and a methyl acrylate/cyclohexenyl methyl acrylate copolymer.

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17. The rigid container of claim 16, wherein the oxygen sensitive drink is beer, wine, or fruit juice.

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